

contents towards the right hypochondriac region, by the assistance of my father. The external iliac was immediately felt, and by passing the finger towards the sacro-iliac symphysis, the internal iliac was distinctly recognized. The artery was then exposed with the handle of the scalpel, and the ligature passed under with the Philadelphia needle, one inch from the bifurcation. Instead, however, of drawing up the needle part with the hook, I found it more convenient to take it with the dressing forceps. One ligature being passed, it was found necessary, from the great depth of the parts, (being about five inches,) to pass down the knot with Dr. A. E. HOSACK'S knot applicator. The ligature was then firmly tied, and the parts were brought together with sutures and adhesive plaster.

In this operation the same difficulty existed as in the case of ligature of the common iliac, by my distinguished friend, Dr. MOTT, of New York, viz. the constant protrusion of peritoneum from abdominal compression created by the struggles of the patient.

Some pain in the bowels, and fever came on a few days after the operation, which was removed by venesection and a laxative. Union by the first intention had taken place to a considerable extent at the first dressing on the eighth day. A considerable quantity of pus was discharged during the first four weeks, at the expiration of which time the ligature came away. The tumour has discharged its contents gradually, and the parts have assumed their natural appearance. The patient has so far recovered his usual state of health, as to be able to walk about his neighbourhood.

*Hudson, N. Y. December 1st, 1827.*

ART. VI. *On Superfætation and Bipartite Uteri.* By JAMES M. PENDLETON, M. D. Lecturer on Midwifery, and Diseases of Women and Children, in the New York Medical Institute.

IT may perhaps be considered by some, that the pages of a public journal, might be more usefully occupied in the examination of subjects of a more practical nature, but it should be remembered that in the investigation of every subject, facts are frequently unexpectedly developed, which, in their application, are extensively and practically important; I therefore trust the subject I have selected will not be without interest. The subject of superfætation as a department of forensic medicine, cannot fail to interest every physician anxious to acquire a thorough knowledge of his profession.

By the term *superfœtation* is meant the impregnation of an ovum at a time when a previous ovum already occupies the cavity of the uterus. Whether this ever takes place is doubted by many; it becomes necessary therefore, in the first place, to establish the fact, before attempting any explanation of the mode in which it occurs. For this purpose I shall select a few well authenticated cases. In the *Dictionnaire des Sciences Medicales*, Art. *Superfœtation*, is related the following. Marianne Bejaud, aged thirty years, was delivered of a boy at her full time, April 30th, 1748. The labour was easy and natural in all respects, and she soon recovered, she remarked, however, what had never occurred in her previous labours, that there was neither lochial discharge, nor secretion of milk from the breasts. A short time after her confinement, she experienced sensations of motion in the abdomen; the singularity of this circumstance led to an examination, and a fœtus was discovered conjectured to be about four and a half months old. From this period the abdomen regularly increased in size, she had nausea, morning sickness, and all the symptoms of pregnancy until the 16th of September, when she was delivered of a girl, full grown, and perfect in all its parts. Under the same article, is a second case: Benoite Franguet was delivered of a girl on the 20th of January, 1780. After her confinement she had no lochial discharge, nor was there any secretion of milk; the abdomen remained larger than usual after delivery, and continued gradually to increase until the 6th of July, when she was delivered of a second daughter, apparently arrived at maturity. By a reference to the dates in these two cases, it will appear, that in the first the second conception took place four and a half months after the first, and in the second, three months and fourteen days after the previous one.

The following case is related by Madame Boivin, sage-femme de l'hospice de la Maternité in Paris. A woman, forty years of age, was delivered, at her full time, on the 15th of March, 1810, of a small child. The abdomen remained distended, and Madame Boivin supposed that there was some foreign body in the uterus. The hand was passed into the uterus, and the cavity was found empty. During two months the woman experienced motion in the tumour, and on the 12th of May she was delivered of a girl, small, weak, and who breathed with difficulty. This woman stated that she had not lived with her husband for a long time, and that the two children were the result of a connexion with another man, once on the 15th and 20th of July, and again on the 16th of September; it will be observed that

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these periods correspond exactly with the differences between births of the children.

These cases are sufficient to establish the fact of superfœtation, according to the definition which we have given it. Periodical journals are filled with cases which are erroneously described as cases of superfœtation of this kind, as the case related by Dr. DEWEES, of a white woman who was delivered at the same birth of two children, one white and one black. What does the case prove? Nothing but that two ova became impregnated by two successive connexions at the same time by two individuals of different colours, and should properly be considered as a case of twins. The impregnation of two ova, in all cases, is probably the result of a distinct connexion, as it is well established that in cases of twins the children are rarely of equal size or apparent development. The same thing may be said of the case of the negress of Gaudaloupe, who was delivered at the same time of a black and a mulatto, she confessed she had connexion the same evening with a white and a black.

There is another case, not unfrequently met with, where an error exists in considering it as superfœtation. It is where at birth there are two children, one of which is considerably larger and more advanced than the other; or perhaps one is alive and perfectly formed, whilst the other is dead and very imperfect. Of this kind is the case related by Dr. DENMAN of the lady of Sir Walter Farquhar. When about five months gone, she experienced a most dreadful fright, and from that time the size of her abdomen began gradually to subside; on the 11th of February she was delivered of a fine though small girl. She continued in great pain and danger until the 25th, when she was delivered of a dead fœtus of about the age of four months. Instances are by no means rare of women being delivered of a full grown fœtus and at the same time of an embryo more or less advanced. Dr. COSAN, in his *Recherches Anat. et Phys. &c.* gives the following instances, "The wife of a surgeon at Amsterdam, was delivered of a well-formed child; ten hours afterwards, she discharged a small embryo having the umbilical cord filled with hydatids."

He relates the following, communicated by Mr. PERCY, as a case of superfœtation, which may be taken as an example of the generality of such cases related in journals. A woman of Torrigny found herself pregnant for the third time. At four months, the motions of the fœtus were distinctly felt. These movements suddenly disappeared; at the end of about seven weeks they again re-appeared, and continued until the expiration of nine months, when she was deliver-

ed of a male child, small but active. After the delivery, the pains continued, and there was discharged from the uterus a black, soft, spongy mass, in the middle of which was a fœtus of four months. This, says Mr. Percy, is another example, to add to the others, of superfœtation. It is certainly more reasonable in this case to suppose, that at the commencement of pregnancy it was simply a case of twins, and that from some cause unknown one of the fœtuses had died and the other proceeded to maturity. There is also one more instance in which superfœtation is frequently described to have taken place, that is, where a female becomes pregnant at a time when she is labouring under an extra-uterine conception; the pages of our journals show that cases of this kind are by no means unusual; as a subject of inquiry we shall not consider them on the present occasion. With this limitation of our subject to those cases in which a female becomes impregnated after the ovum has passed into the cavity of the uterus, and in which the delivery of the two takes place at different periods and the fœtuses are both mature and perfectly formed, we proceed to consider the explanation of the mode in which this happens. Various opinions have been promulgated on this subject. First, it has been supposed that a second ovum impregnated has passed through the fallopian tube, to the cavity of the uterus, where, meeting the membrana decidua, it has pushed it away and attached itself to the uterus; the objections to this are, in the first place, the changes which the uterus undergoes in consequence of impregnation, the formation of a membrane which lines the cavity of the uterus, by which even if the ovum could become impregnated it could not get into the uterus, but secondly, the secretion of a mucus in the neck of the uterus by which the semen could not come in contact with the ovum, and consequently no impregnation be possible.

Dr. Dewees explains the occurrence of superfœtation on the existence of seminal absorbents arising from the vagina and conveying the semen to the ovum, where impregnation takes place. It cannot be required to produce arguments to refute a doctrine which is founded on a gratuitous assumption, such as the existence of seminal absorbents. No anatomist whose works I have ever seen speak of such vessels, and they probably owe their origin to the difficulty which attends every attempt at explaining the mysterious subject of conception. We shall now endeavour to show that this fact can be readily and satisfactorily explained by reference to the fact of the uterus being found divided into two compartments totally distinct from each other. That the uterus is thus found bilobate, or, as it is usually styled, double, the following cases satisfactorily establish.

DUPUYTREN gives the following instance, "A woman, thirty-eight years of age, was brought to his theatre for dissection; a red substance was seen projecting from the vulva; when traced, it was found to extend throughout the whole length of the vagina: the os tincæ was divided by clefts, one perpendicular and one transverse. The finger when insinuated met with an obstacle in the median line of the uterus, on each side of which there was an opening. The neck of the uterus and the body were divided and separated from each other. The preparation was preserved in the anatomical museum of the Faculté de Paris.

The case related by Dr. TIEDEMANN is very interesting, and affords a practical caution to accouchers in forming opinions from manual examination. This female, during her labour was visited by two physicians, each of whom examined her; one declaring that she was not pregnant, that the os tincæ was firm and close; the other, that the os tincæ was open, and the head already engaged in it. This difference of opinion caused a discussion which led to an examination, when they found two vaginæ and a double uterus. Madame Boivin relates the following. In August, 1813, there was brought to her hospital a child, a few days old, who died shortly after of an imperforate anus. On examining the body, the uterus was found divided into two portions resembling lateral cones and opening into one vagina.

HALLER mentions the following case. A young lady, aged about twenty-six years, after being a long time indisposed, died of hysteric convulsions. On examining the body he found a double uterus with two vaginas, each accompanied by a single tube and ovary of a natural shape. A remarkable case was related, by M. CHAUSSIER, to the Faculté de Medecine of Paris. He exhibited the uterus of a woman who died at the Hospital de la Maternité, where she was delivered of her tenth child. The uterus consisted of but one-half, and that extending toward the right side: there was but a single fallopian tube and ovarium. Examples of double uteri might be multiplied to a great extent, but the foregoing are sufficient to establish the fact of their actual occurrence. Those who require further confirmation, may consult the works of HALLER, EISENMANN, *Memoires de l'Academie des Sciences*, Canestrini *Historia de Utero duplici*, *Memoirs of the Royal Society of London*, vol. iv. *Dictionnaire des Sciences Medicales*, &c. where they will find numerous cases of this kind, under the denomination of uteri double, bifid, bilobate, bicorn, bilocular, bipartite, &c. &c. Granting these facts, which cannot be denied, the whole difficulty of superfætation disappears, each of these cavities may be considered as

distinct uteri, and such in fact they are, not only in function, but, in some cases, actually separate and distinct throughout; it resolves itself into a parallel case to that of many animals where the uterus is separated into two cornua, and in which superfœtation is known to take place. The probability of this unusual structure of the uterus, in cases of superfœtation, is strengthened very much by the case of Madame Boivin. She states that after the birth of the first child, she passed her hand into the uterus to ascertain the cause of the tumour which was perceptible externally, and she found the cavity empty. This would be the case certainly if she examined the cavity from which the child was expelled.

The existence of two cavities in the uterus also explains the occasional occurrence of menstruation during pregnancy, a fact established by the testimony of DENMAN, BARD, HOSACK, &c. Having, therefore, established the fact of superfœtation and the difficulty of explaining it, and also the frequent occurrence of bilobate or double uteri, and the natural solution which it affords of all those difficulties, we may naturally conclude that where one exists the other will be found to exist also. I shall not at present consider the confirmation which this subject gives to the theory of analogues, promulgated by M. GEOFFROY ST. HILLAIRE, nor to the correspondence which these various degrees of anomaly in the structure of the uterus have with the structure observable in the various scale of inferior animals. This may be the subject of another paper.

ART. VII. *Remarks on the various modes usually adopted for the removal of the Tonsils.* By ALEXANDER E. HOSACK, M. D. of New York.

THE frequent occurrence of the disease requiring the operation of removing the tonsils, should be deemed a sufficient apology for calling the attention of the profession to a subject apparently so simple in itself, and which is rendered still more so from the various improvements suggested by the surgeons of this country, as well as by those of Europe.

Of late years the removal of the tonsils by the canula and silver wire, was considered the only safe and practicable mode of removing those glands. The mode of operating was by means of a double canula from three or four inches in length, armed with a silver wire, the latter to be placed round the tumour, and to be drawn with a